



***K200D | K20D***

**PENTAX®**  
pentaxslr.com



Camera: K20D

Lens: SMCP DA\* 16-50mm F/2.8 ED AL (IF) SDM

# Body, Lens and Flash

## Experience the PENTAX DSLR System

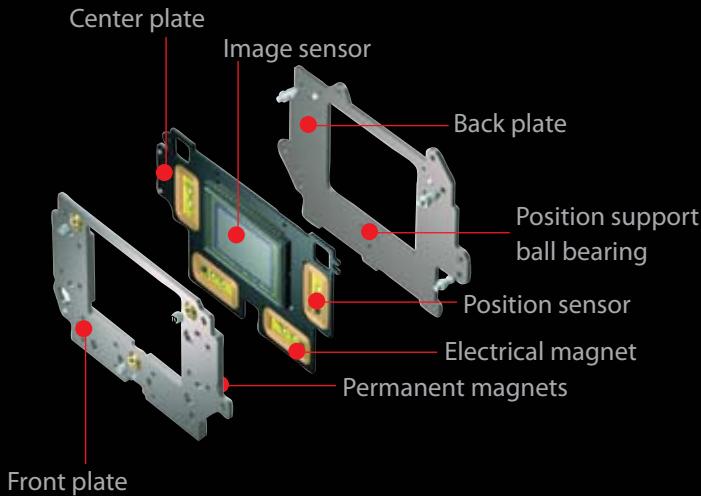
PENTAX digital SLR camera systems combine the latest in digital technology with legendary PENTAX optics, craftsmanship and functionality that are essential to your photography experience.

Go ahead and grip the perfectly balanced, compact, lightweight bodies reinforced with a high-rigidity steel chassis, and experience the unmistakably clear, high-precision viewfinder. Connect with the vast heritage of PENTAX Super-multi-coated optics that provide seemingly limitless opportunities to create crystal-clear imagery with enhanced color and definition. Unleash the power of advanced, wireless P-TTL auto flash and high-speed synchronization of powerful PENTAX flash attachments.

PENTAX digital SLR camera systems blend perfectly to offer ease of use, performance and portability to satisfy everyone from the novice photographer to the most discerning enthusiast.



# Shake Reduction



The PENTAX-developed "Shake Reduction" technology solves one of the oldest photographic problems: blur caused by handheld camera shake. The K Series Digital SLRs produce sharp photos in challenging situations without having to use a tripod. Hand-held photography is now possible with long telephoto lenses or when long exposure times are required due to poor lighting.

The PENTAX "Shake Reduction" system is integrated into the camera body and is independent of the lens in use. The system ensures that at the moment of exposure the compensating movement of the image sensor provides blur-free pictures.

The advantage is obvious: you may increase your hand-held shooting by 2.5 to 4 stops.

PENTAX owns over 30 patents for the SR system, which uses a ball-bearing-mounted oscillator unit with four electromagnets that position the free-floating image sensor. Angular velocity sensors detect camera movement and relay the amount of compensation necessary to the electromagnets that move the sensor to compensate for any shake.



Shake Reduction Unit

# K-mount Heritage

PENTAX has manufactured over 24 million lenses in the last six decades. For every assignment, we believe there needs to be a lens that matches each photographer's style – amateur and professional alike. PENTAX DSLR bodies offer backward compatibility with each and every one of these lenses.\*

Choose from our assortment of new DA\*, DA Limited and DA lenses specifically designed for use with PENTAX digital SLRs or pull a favorite PENTAX lens from the camera bag. Whichever lens is used, whether the most recent lenses or a classic screw mount, it will faithfully capture the image desired.

\*With adapter for screw mount and 645/67 lenses.



# SDM Lens Compatibility



## PENTAX DA\* Series

K-mount compatibility extends to the high performance smc PENTAX DA\* series of lenses. The PENTAX-DA\* series delivers the highest level of optical quality and reflects the PENTAX commitment to deliver the ultimate images in digital photography. Bringing together advanced optical technologies, special optical-glass elements and original lens coatings, these interchangeable lenses are superior in terms of contrast, clarity and edge-to-edge sharpness.

Each PENTAX DA\* series lens feature a tightly sealed, weather-resistant and dust-resistant construction to enhance durability for use in rain or dusty conditions making each a perfect companion for the weather-sealed PENTAX digital SLR. The lenses also feature the PENTAX original Quick-Shift Focus System for instant switching to manual focus operation and PENTAX original SP (Super Protect) coating to repel dust, water and grease. A new SDM system has been incorporated for smoother, quieter autofocus operation using a built-in supersonic motor.



*Compatibility with SDM lenses that offer silent, accurate auto focus and weather resistance.*

# PRIME IMAGE Processing



The Pentax Real Image Engine (PRIME) was developed specifically by PENTAX for our cameras in order to meet the performance requirements of higher resolution sensors. The PRIME engine converts the digital signal into the image you desire by assuring truer color tones, a wider dynamic range, and natural looking high ISO images.

Ultimately, PRIME provides beautiful, natural results similar to what you see shooting with film. By allowing customization of the image, the advanced circuitry frees you to focus on the image and capture the perfect shot.



# Custom Image Modes



The Custom Image modes on the K20D and K200D give you superior control of how the PRIME processor develops images. These modes apply saturation, hue, contrast and sharpness settings to JPEG images, and give a starting point for RAW image development. There is a choice of six Custom Image modes which include:

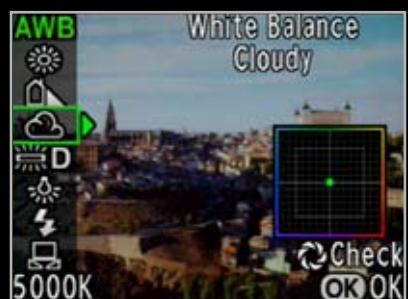
- Bright – gives increased saturation, hue, sharpness and contrast for images that are a bit more elaborate or colorful straight from the camera.
- Natural – makes no adjustment to image parameters. This is perfect for photographers who want to maximize an image for post capture manipulation.
- Portrait – decreases contrast and sharpness to give soft, natural skin tones.
- Landscape – increases saturation, contrast and sharpness for beautiful images of the natural world.
- Vibrant – maximizes all parameters to give the brightest colors and enhanced sharpness for the most vivid scenes.
- B&W – mimics the effects of black and white photography, including the effects of color filters. It even adds an infrared filter effect for dramatic monochrome scenes.

Plus, each of the Custom Image modes can be further modified to meet your needs. All settings are clearly displayed on the LCD screen with a radar display showing how the settings affect each color.



# Custom White Balance

The advanced white balance options of the K20D and K200D allow the perfect capture of the color white. The white balance setting can be selected from seven pre-set options, with three options just for fluorescent lighting, plus a manual white balance setting, and three preset color temperatures. Additionally, each setting can be further fine-tuned to balance even the most difficult lighting conditions. All settings can be verified through the digital preview function.



# Adjustable High Sensitivity Noise Reduction

As the sensitivity increases with any camera, so does the possibility of noise. While every effort has been made to minimize the effect of noise, some conditions demand additional noise reduction. However, once noise reduction has been applied to an image, it cannot be reversed. PENTAX bodies give the ability to apply four levels of noise reduction to meet your needs, from no adjustment to strong control of noise.



# In-camera Processing

PENTAX DSLR bodies offer an in-camera RAW converter for those times you want to print an image but don't have access to a computer to process the RAW file. The resolution, quality setting, white balance, sensitivity, Custom Image mode, and Noise Reduction may all be adjusted, and the image can be saved either as a JPEG or, new to the K20D and K200D, an 8-bit TIFF file.

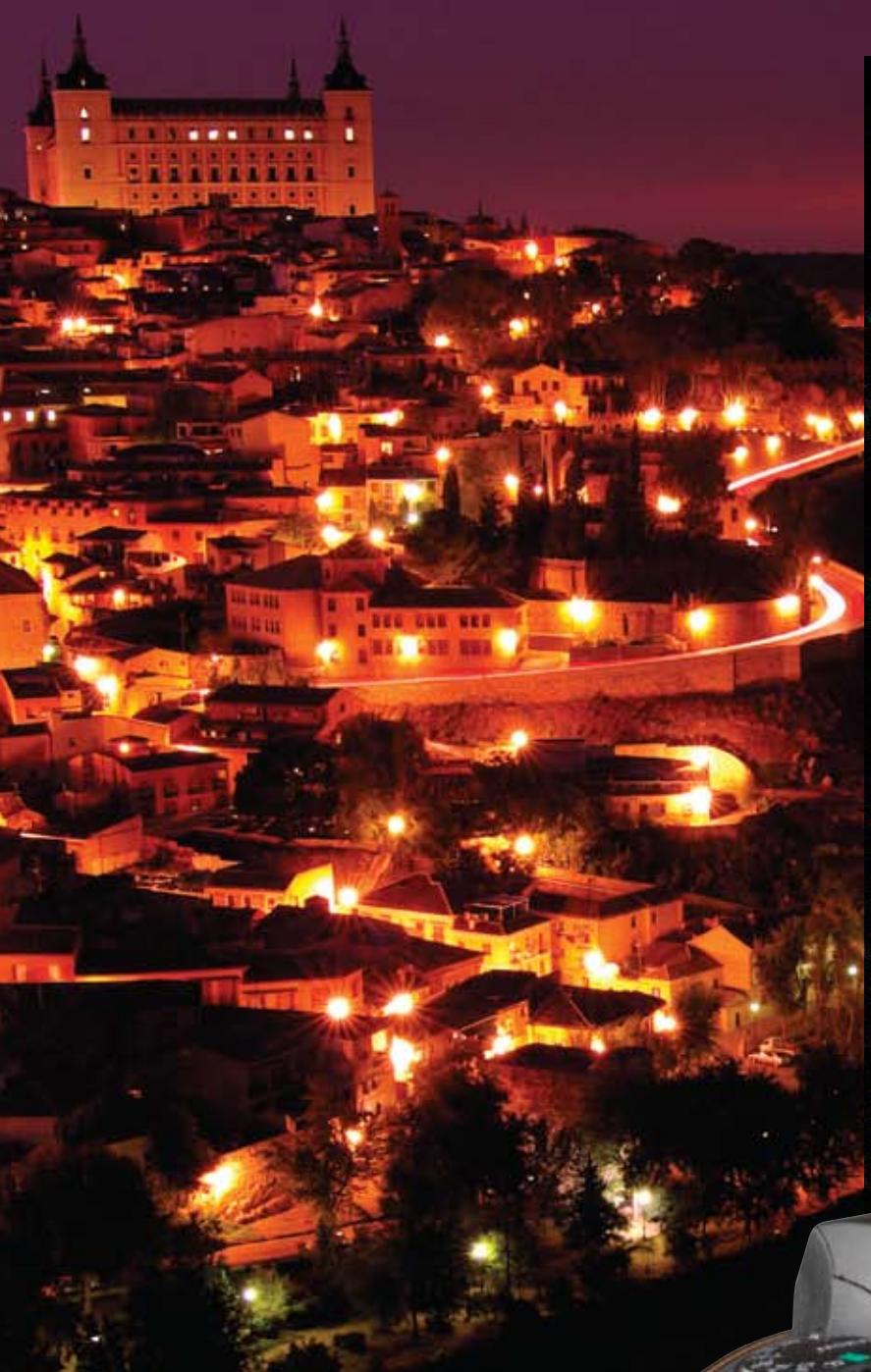


# Digital Preview

Always know your results before you shoot. The Digital Preview feature allows you to see the shot before actually tripping the shutter release, thus allowing you to verify the camera settings. And now, should your preview happen to be a winning shot, you can save the image as a JPEG file.



# Dust/Weather Resistant



## Protection From The Elements

Whether you're shooting in a misty, tropical rain forest, on a snowcapped peak, or along a dusty desert trail, the seals around the durable PENTAX DSLR bodies reliably protect the inner components against humidity, moisture and dust particles. The fiber-reinforced polycarbonate body surrounding the high-rigidity, stainless steel chassis provides plenty of strength for every day use.

A complete system: the K20D is protected by 72 seals and the optional battery grip with an additional 38 seals, while the K200D has 60 seals in the body and 14 in the grip, assuring complete protection against humidity, dust or sand. PENTAX offers the highest level of protection in either class. Durable and solid: the stainless-steel chassis is also impermeable to corrosion and is extremely stable.



## Dust Removal

Behind the "Dust Removal" designation lays an entire system unto itself. The surface of the low pass filter is sealed with a nanotechnology based fluorine coating. This ensures that dust has a difficult time adhering to the sensor surface. Dust that may remain on the surface is shaken off when the SR system shifts the CCD at high speed. The dust that is shaken off the CCD, then falls onto an adhesive sheet eliminating any possibility of its returning to the CCD surface. Dust flecks are now a thing of the past, along with annoying and time consuming retouching work.  **Dust Removal**

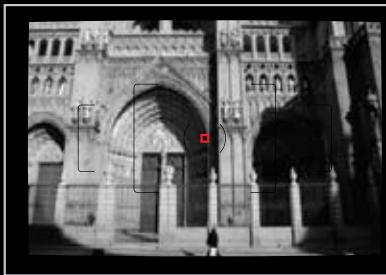
## Dust Alert

Occasionally, especially when shooting in humid conditions, the Dust Removal system will not purge all dust specks. If you are shooting in extremely dusty or dirty conditions, the new Dust Alert system will save you from time consuming retouching. This system analyzes the sensor to determine if and where any dust remains after the Dust Removal system is activated. The results are displayed on the LCD screen, showing exactly where any dust remains. The image is reversed so you can quickly pinpoint and remove dust from the sensor itself.



# 11-point Auto Focus

The K-Series features an 11-point autofocus system. In automatic operation (AUTO) the camera recognizes which object is nearest and chooses that object as the main focus point. For more direct control, select any of the 11 points individually. It is also possible to simply select the center of the image as your main point of focus. With continuous autofocus, the focus adjusts as your subject moves within the frame, or should you prefer more direct control, you may always focus manually.



# Flexible RAW Button

The RAW button on PENTAX DSLR bodies allows you to quickly change your file format while shooting without having to navigate through an extensive series of menus. You may customize this button to switch to your preferred format and to either remain at that setting, or remain there for only one exposure.



## 16-segment Metering

The K-Series easily handles even the most difficult lighting conditions with its 16-segment metering system. The system will accurately assess the balance between the bright and dark areas within the segments automatically, or you may opt for center weighted or spot metering.



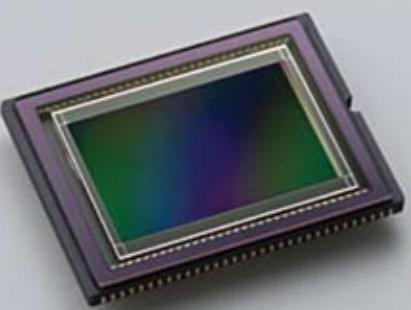
# K20D

Advanced photography involves a serious passion for developing your own ideas and experimenting with approach, subjects and technique. The PENTAX K20D builds on the technology of the award winning K10D and offers the highest resolution camera in the advanced photo enthusiast category with a number of customizable features that are ideal for the more experienced shooter.



## The Next Generation

In designing the K20D Digital SLR, PENTAX made the significant transition to a higher resolution 14.6 megapixel sensor, rivaling the detail previously only found in images captured with 35mm film. This considerable gain offers 50 percent more resolution than 10 megapixel sensors, and 20 percent more resolution than 12 megapixel sensors used by our competition. Noise is minimized and maximum sensitivity is achieved by using peripheral circuitry merely 0.13 micro meters thin. This allows the photo diodes in each pixel of the sensor to be maximized at over 40 percent of the total pixel area (typically only 30-35 percent in similar sensors from other manufacturers). It also allows a more direct light path to assure every detail is captured.



## 14.6 CMOS Sensor

CMOS, or complementary metal-oxide-semiconductors, are a major class of integrated circuits, and CMOS technology is used in a number of electronics including image sensors. Two important characteristics of CMOS devices are high noise immunity and low power consumption.

# Unique Exposure Modes

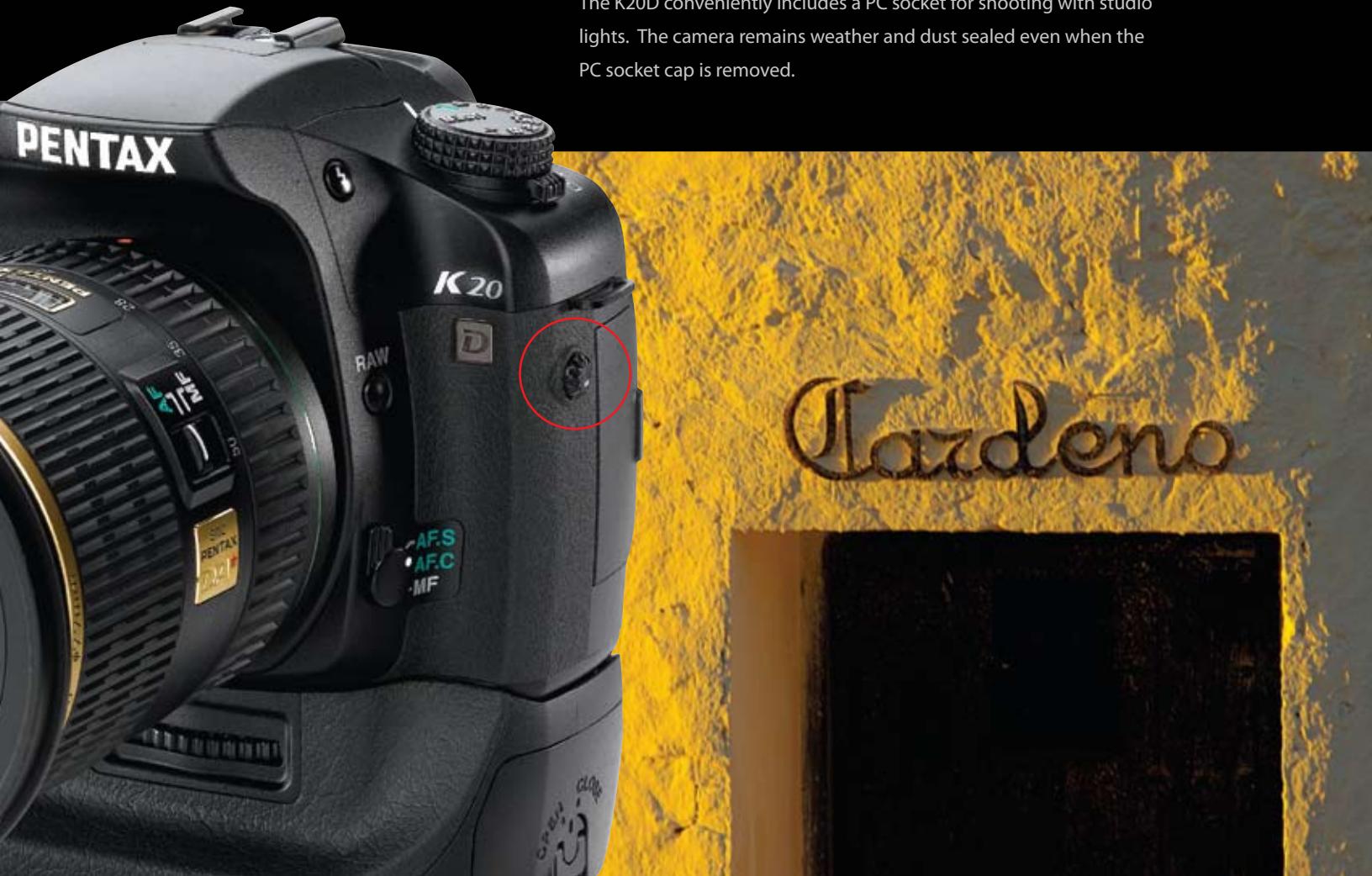
Expect the right exposures with the settings you want. The K20D presents multiple options for automatic exposure. The Program Automatic mode offers Hyper Program to instantly change the shutter speed or aperture on the fly. When you change either of these settings, the other exposure parameters automatically change accordingly for proper exposure. The Sensitivity-Priority AE (Sv) mode is designed to automatically select the optimum combination of aperture and shutter speed for a user selected sensitivity. In the SV mode you may shift the sensitivity simply by turning a dial. The Shutter-Priority (Tv) mode lets you choose the optimal shutter speed and the Aperture-Priority (Av) mode lets you select the appropriate aperture. Another exposure mode offered by the K20D is Shutter & Aperture-Priority AE (TAv), which is designed to automatically select the most appropriate sensitivity for a user-selected shutter speed and aperture combination. Plus, you may choose from Manual (M), Bulb (B) and X-sync (X) settings for even more versatility, or the USER setting that allows you to preset your preferred parameters. All exposure adjustments are accessible through two ergonomically placed dials on the front and the back of the camera.

If you are working with PENTAX F-, FA-, DA- or DFA-series lenses, you can benefit from the MTF data: a microchip in the lens passes information to the camera regarding the optically optimal and lens-specific aperture to use.



## PC Sync Socket

The K20D conveniently includes a PC socket for shooting with studio lights. The camera remains weather and dust sealed even when the PC socket cap is removed.



## Continuous Shooting, Interval Shooting

The high speed shutter unit of the K20D, rated for 100,000 cycles, allows shutter speeds as fast as 1/4000 second, a 1/180 second flash sync. speed, and automatic exposures up to 30 seconds, plus a bulb mode for extended exposures. For high speed action, the K20D offers a number of options for fast capture. In normal, high speed situations, the camera will capture at 3 fps for 38 JPEGs and 14 RAW images. You also have the option of setting the K20D to an alternate continuous shooting mode that slows the capture rate to 2.3 fps but allows you to shoot an unlimited number of JPEG images (to your card's capacity); perfect for extended capture sequences. And, for extended time lapse sequences, there is an interval timer that can be set to capture images at a specific time interval, starting at a specific time.



## Pentaprism Viewfinder

The pentaprism viewfinder in the K20D is designed to give you the best view while composing your image. The viewfinder gives a 95 percent field of view and 0.95X magnification so you can see as much of the image as possible before capture. The viewfinder also provides all the important image information in a concise manner: focus point indicated in red, in-focus indicator, focus mode stats, shutter speed, aperture, exposure compensation, number of images remaining, Shake Reduction status, and with a press of the OK button on the back of the camera, the current ISO setting. Additionally, the focusing screen is interchangeable so you can use a PENTAX grid screen or scale screen.



# 2.7 inch LCD Panel

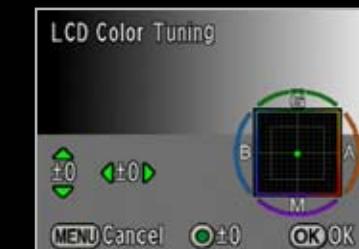


The PENTAX K20D incorporates a large 2.7 inch color LCD monitor with a wide-view design, allowing the photographer to see the monitor image over 160 degrees vertically and horizontally.

With a total of 230,000 dots it accurately displays your images with minimal power drain. It also offers digital zooming of playback images up to 32X for easy confirmation of the image's focus status and details, and, due to its large size, you can even review two images side by side. The large monitor allows for large letters, digits and icons on the menu screens to facilitate menu confirmation and camera operations.

## LCD Color Adjustment

The colors displayed on any LCD screen will change as lighting conditions shift. This can be critical when you are shooting JPEG images, or converting RAW files in-camera. The LCD on the K20D can be adjusted to display the correct colors for your most common lighting conditions, much like having a white balance feature specifically for your LCD to allow better confirmation of your captured image.



## ISO Adjustment

The K20D features an auto sensitivity control function, which automatically sets the optimum standard output sensitivity – up to ISO 6400 in the Expanded Sensitivity setting, based on such data as the subject's brightness level and the lens focal length. You have full control of the range of auto sensitivities available. Or, you can manually select the desired sensitivity.



## Enlargement of Dynamic Range

The dynamic range enlargement function of the K20D allows you to better emulate the results you typically find only with images captured on film. It does this by increasing the dynamic range by 200 percent to better capture details in highlight areas of an image.



## Enlarged Menu

PENTAX offers two improvements in the menu of the PENTAX K20D. The new scrolling menu items offer you a complete description of each menu option and the function it provides, while an enlarged letter option allows you to boost the font or letter size by 50 percent vertically for easy viewing.

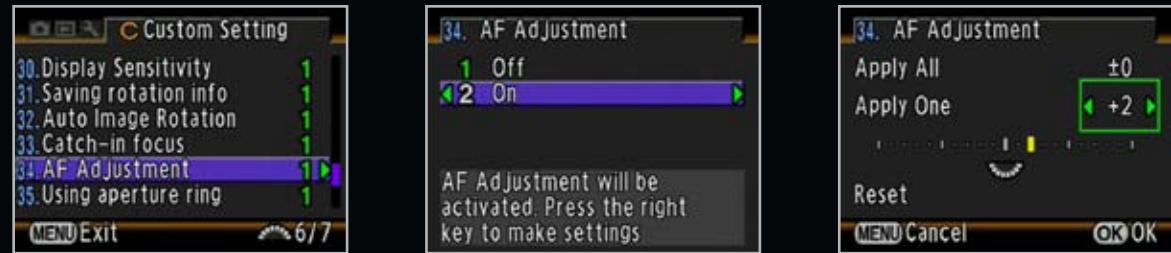


# Custom Functions

The K20D is fully customizable to meet your individual shooting needs. You have access to 36 options with 93 settings to give you complete control over your camera. These include the ability to reprogram the e-dials to your shooting style – the type of preview, whether Live View, Digital Preview, or a traditional depth-of-field preview – and the program line used by the camera's metering system.

## Focus Adjustment

PENTAX's digital specific DA Series of lenses are tuned to properly focus with all PENTAX bodies. However, the time tested K-mount allows you to use any PENTAX lens ever produced. Some older lenses may produce back- or front-focused images. The K20D's AF Adjustment function allows you to adjust the focus position for 20 different lenses.



# Form and Function

Designed with photographers in mind, every dial and button is carefully placed to assure superior ergonomics and ease of use. Whether setting up the camera at the beginning of a shoot, or shifting settings on the fly, the K20D is designed to accommodate your changes with the minimum amount of effort.

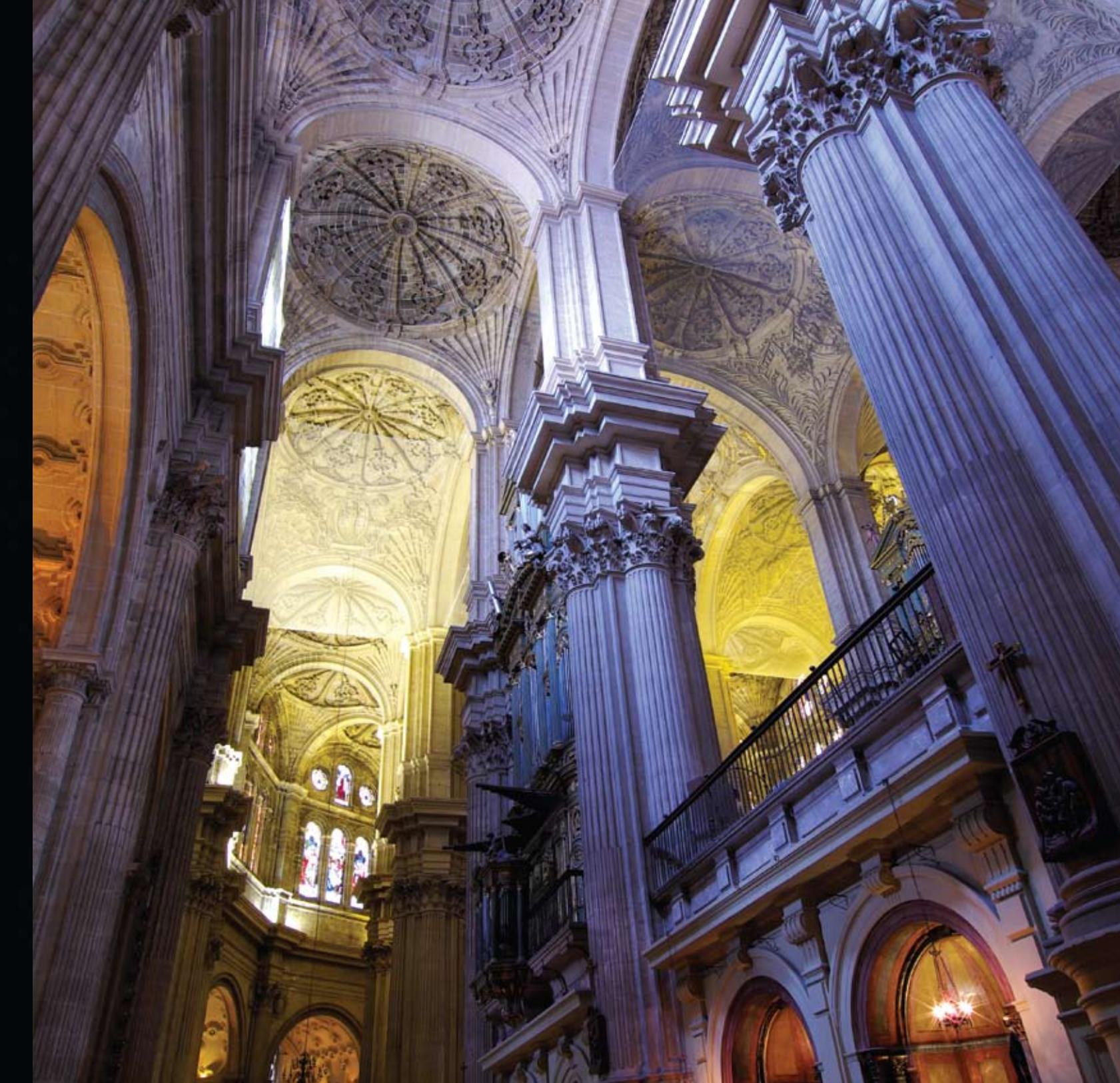


# K200D

The PENTAX K200D offers an easy-to-use interface while incorporating advanced imaging technology from the award winning K10D. This camera invites newer users to grow and develop photography skills as they learn and become more passionate about their hobby.

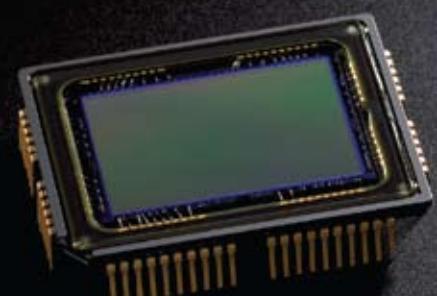


**K200D**



## 10.2 MP CCD

The 23.5 x 15.7 mm CCD sensor records photos with a resolution of up to 10.2 megapixels. This is enough for you to produce truly astounding prints even at 20x30 inches or more without difficulty. The high resolution sensor also allows photos to be cropped so that your composition may be perfected. High resolution combines with the DDR2 buffer memory to give quick capture rates up to 2.8 frames per second. This assures that you will not miss the fine details of every special moment.



# Auto Picture, Scene and SV Modes



The K200D offers the PENTAX-developed Auto Picture mode and a Scene mode pallet. The Auto Picture mode automatically and instantly selects one of the four Picture modes – including Portrait, Landscape and Macro – by calculating various photographic factors to assure optimum results. The Scene mode allows the photographer to select from eight modes specialized for conditions such as Night Scene, Portrait, Sunset, or Pet mode. The photographer chooses the mode to match the subject and scene and the camera automatically selects the proper exposure, white balance, and other settings for superior results.

The Sensitivity-Priority AE (Sv) mode is designed to automatically select the optimum combination of aperture and shutter speed for a user selected sensitivity. In the SV mode you may shift the sensitivity simply by turning a dial.



## ISO Adjustment

The K200D features an auto sensitivity control function, which automatically sets the optimum standard output sensitivity, up to ISO 1600, based on such data as the subject's brightness level and the lens focal length. Since this function allows the use of higher shutter speeds in poor lighting situations (such as indoor sports events and night scenes), it helps the photographer to effectively reduce camera shake and help prevent blurred images.



## Enlarged Dynamic Range

For those times you want to capture the maximum amount of detail in an image, the K200D offers a dynamic range enlargement function. This function brings out the detail in highlighted portions of your image, while maintaining detail in darker areas.

## Continuous Shooting

To track the movement of an active subject or capture a sequence of the subject's expressions, the K200D offers a continuous shooting mode that allows the photographer to capture multiple images at a maximum speed of approximately 2.8 images per second.

## Penta-mirror Viewfinder

The K200D features a lightweight penta-mirror viewfinder, which combines PENTAX-original finder optics with a Natural-Bright-Matte II focusing screen to deliver a bright, clear subject image with 0.85X magnification and 96 percent field of view.

## 2.7 Inch LCD

The PENTAX K200D incorporates a 2.7 inch color LCD monitor on the back panel. With a wide-view design, the monitor allows the photographer to verify images on the monitor over a 160 degree angle of view vertically and horizontally. With a total of 230,000 dots for clear images, it also offers digital zooming of playback images up to 16X for easy confirmation of the image's focusing status and details. The large monitor allows for large letters, digits and icons on the menu screens to facilitate menu confirmation and camera operations.



# Customization



## Enlarged Menu

PENTAX has greatly improved the menu displays in the K200D. The new scrolling menus offer you a complete description of each menu item and the function it provides, while an enlarged letter option allows you to boost the font or letter size by 50 percent vertically for easy viewing.



## Custom Functions

The K200D offers 23 custom options with 52 settings that allow you to adjust how your camera functions. As you learn more about the camera and the way you like to take pictures, the camera will adjust to meet your needs.

## Power Supply

With a set of Energizer® Lithium batteries included with every K200D, you are assured long battery life – up to 1,100 images. Since AA batteries are easy to purchase almost anywhere, you can keep on shooting even in the most remote locations.

To extend your shooting time even further, the BG-3 battery grip takes an additional four AA cells, ensuring optimal performance of the K200D camera. The battery grip features an additional shutter release, particularly practical if shooting vertically. With proven PENTAX ergonomics the camera fits reliably and comfortably in the hand.



# Form and Function

The body of the K200D is designed so that every button and dial is in easy reach. This makes shooting a simple, intuitive operation. However, the camera does not sacrifice in areas of durability and strength. You know as soon as you hold this camera that it will be a photography companion as you learn more about the art.



# K20D Specifications

## CAMERA HARDWARE

### SENSOR

Type: CMOS with primary color filter and integrated shake/dust reduction sensor movement system  
Size: 23.4 x 15.6mm  
Color depth: 8 bits/channel JPG, 12 bits/channel RAW  
Effective pixels: 14.6 MP, Total pixels: 15.1 MP

### FILE STORAGE MATRIX (BASED ON 1GB MEMORY)

JPG	****	***	**	*
4672x3120 (14.6M)	68	117	212	411
3872x2592 (10M)	101	168	296	616
3008x2000 (6M)	176	285	491	915
1824x1216 (2M)	461	737	1233	2238
<b>RAW</b>				
4672x3120 (14.6M)	40			

### LENS MOUNT

Type/construction: Pentax KAF2 bayonet stainless steel mount  
Usable lenses: Pentax KAF2, KAF, and KA (K mount, 35mm screwmount, 645/67 med format useable w/ adapter and/or restrictions)

SDM function: YES

### FOCUS SYSTEM

Type: TTL phase-matching 11 point wide autofocus system (SAFOX VIII)  
Focus modes: AF Single (w/ focus lock), AF Continuous, Manual  
Focus point adjustment: Auto, User-Selectable, Center  
AF assist: YES, via built-in flash

### VIEWFINDER

Type: Pentaprism  
Coverage (field of view): 95%  
Magnification: 0.95x (w/ 50mm f/1.4 at infinity)  
Diopter adjustment: -2.5 to 1.5  
Depth-of-field preview: Optical diaphragm stop-down, Digital, Live View

### LCD MONITOR

Type: 2.7" TFT color LCD monitor, adjustable brightness/color, Live View available (TTL by image sensor, 100% FOV)  
Resolution: Approx 230,000 dots  
Wide angle viewable: YES

### BUILT-IN FLASH

Type: Retractable P-TTL popup flash  
Guide number: 13 (100/m)  
Coverage: 28mm wide angle (equivalent to 35mm)  
Flash exposure compensation: -2 to +1 EV in 1/2 steps

### EXTERNAL FLASH

Type: Hot Shoe (P-TTL, high speed sync available), Wireless with PENTAX dedicated flash, X-Sync socket. Synchronization speed: 1/180s

### STORAGE MEDIA

Removable memory: SD, SDHC

### INTERFACES

Ports: USB 2.0 hi-speed, video out, DC input, cable switch, X-Sync socket  
Video out: NTSC, PAL  
Printer interfaces: PictBridge

### POWER SUPPLY

Power source: Rechargeable Li-Ion battery D-LI50, BG2 Battery Grip (optional) for second D-LI50 battery  
Recordable images: Approx 740 (approx 530 with 50% flash)  
Playback time: Approx 330 min

### PHYSICAL SPECIFICATIONS

Body dimensions (W x H x D): 5.6 x 4.0 x 2.76"  
Body weight: Without battery or removable memory: 25.2 oz  
Loaded and ready: 28.2 oz  
Operating temperature: 32-104°F

# K200D Specifications

## CAMERA HARDWARE

### SENSOR

Type: Interline interlace CCD with primary color filter and integrated shake/dust reduction sensor movement system  
Size: 23.5 x 15.7mm  
Color depth: 8 bits/channel JPG, 12 bits/channel RAW  
Effective pixels: 10.2 MP, Total pixels: 10.75 MP

### FILE STORAGE MATRIX (BASED ON 1GB MEMORY)

JPG	***	**	*
3872x2592 (10M)	202	345	592
3008x2000 (6M)	337	575	990
1824x1216 (2M)	915	1549	2627
<b>RAW</b>			
3872x2592 (10M)	59		

### LENS MOUNT

Type/construction: Pentax KAF2 bayonet stainless steel mount  
Usable lenses: Pentax KAF2, KAF, and KA (K mount, 35mm screwmount, 645/67 med format useable w/ adapter and/or restrictions)  
SDM function: YES

### FOCUS SYSTEM

Type: TTL phase-matching 11 point wide autofocus system (SAFOX VIII)  
Focus modes: AF Single (w/ focus lock), Manual, AF Continuous available in Action mode (including Auto Pict Action), Kids mode, Pet mode, P/A/S/M/B/Sv  
Focus point adjustment: Auto, User-Selectable, Center  
AF assist: YES, via built-in flash

### VIEWFINDER

Type: Penta-Mirror  
Coverage (field of view): 96%  
Magnification: 0.85x (w/ 50mm f/1.4 at infinity)  
Diopter adjustment: -2.5 to 1.5  
Depth-of-field preview: Optical diaphragm stop-down, Digital

### LCD MONITOR

Type: 2.7" TFT color LCD monitor, adjustable brightness  
Resolution: Approx 230,000 dots  
Wide angle viewable: YES

### BUILT-IN FLASH

Type: Retractable P-TTL popup flash  
Guide number: 13 (100/m)  
Coverage: 28mm wide angle (equivalent to 35mm)  
Flash exposure compensation: -2 to 1 EV in 1/2 steps

### EXTERNAL FLASH

Type: Hot Shoe (P-TTL, high speed sync available), Wireless with PENTAX dedicated flash. Synchronization speed: 1/180s

### STORAGE MEDIA

Removable memory: SD, SDHC

### INTERFACES

Ports: USB 2.0 hi-speed, video out, DC input, cable switch  
Video out: NTSC, PAL  
Printer interfaces: PictBridge

### POWER SUPPLY

Power source: AA (4x lithium, alkaline, NiMH rechargeable)  
Recordable images: Approx 1100 w/lithium (approx 550 w/flash use)  
Playback time: Approx 700 min

### PHYSICAL SPECIFICATIONS

Body dimensions (W x H x D): 5.2 x 3.7 x 2.9"  
Body weight: Without battery or removable memory: 22.2 oz  
Loaded and ready: 24.3 oz w/lithium batteries (25.6 oz w/ alkaline batteries)  
Operating temperature: 32-104°F

## IMAGE CAPTURE

### METERING SYSTEM

Type: TTL open aperture, 16 segment metering  
Sensitivity range: EV 0-21 (ISO 100, 50mm f/1.4)  
Multi-segment: YES, 16 segments  
Center weighted: YES  
Spot: YES  
Exposure compensation: +/- 2 EV (1/2 or 1/3 steps)  
Exposure lock: YES  
Exposure bracketing: YES, 3 frames, up to +/- 1.5 (1/2 steps) or +/- 1.0 (1/3 steps)

### ISO SENSITIVITY

Auto: 100-3200 ISO (1, 1/2, 1/3 steps), Bulb mode up to ISO 1600  
Manual: 100-6400 ISO (1, 1/2, 1/3 steps)

### WHITE BALANCE\*

Auto preset modes: Auto, Daylight, Shade, Cloudy, Tungsten, Fluorescent (W, D, N), Flash, Color Temperature  
Manual mode(s): YES  
\* WB fine adjustment available

### SHUTTER

Type: Electronically controlled, vertical run, focal plane shutter  
Shutter speed: 1/4000 to 30 sec, bulb available

### CAPTURE MODES

Mode selection: Auto Picture, Picture (Portrait, Landscape, Macro, Action, Night Scene Portrait, Standard Flash-Off), Scene (Night Scene, Surf & Snow, Food, Sunset, Kids, Pet, Candlelight, Museum), Program, Sensitivity Priority, Shutter Priority, Aperture Priority, Metered Manual, Bulb

### DRIVE MODES

Mode selection: Single, Continuous (Hi, Lo), Burst (1.6M, JPG), Self-Timer (12s, 2s), Remote (0s, 3s), Remote Continuous, Auto Bracket, Extended Bracket, Multi-Exposure, Interval Continuous FPS:  
- 2.8 FPS (38 JPG and Continuous Hi, 14 RAW PEF, 16 RAW DNG)  
- 2.3 FPS (unlimited JPG and Continuous Lo, 14 RAW PEF, 16 RAW DNG)  
- 21 FPS in Burst mode (115 at 1.6M, \*\*\* JPG)  
Self-timer: YES (12s, 2s)  
Remote control: YES, infrared (0s, 3s) and cable switch supported

### PLAYBACK MODES

Mode selection: One shot, two shots, index (4, 9, or 16 thumbnails), magnification, image rotation, folder view, slideshow, histogram, bright/dark indicators, RAW to JPG  
Magnification: Up to 32x, scrollable  
Digital filters (playback): B&W (4), Sepia (3), Color (18), Color Extract (6), Soft (3), Illustration, HDR (3), Slim (+/- 8), Brightness  
Continuous FPS:  
- 2.8 FPS (4 JPG and Continuous Hi, 4 RAW)  
- 1.1 FPS (unlimited JPG and Continuous Lo, 4 RAW)  
Self-timer: YES (12s, 2s)  
Remote control: YES, infrared (0s, 3s) and cable switch supported

### FILE FORMATS

Still: RAW PEF/DNG, JPG (EXIF 2.21), DCF 2.0 (design rule for camera file system), DPOF, Print Image Matching III

### LANGUAGE SUPPORT

English, French, German, Spanish, Swedish, Dutch, Italian, Russian, Portuguese, Danish, Finnish, Polish, Czech, Hungarian, Turkish, Japanese, Korean, Traditional/Simplified Chinese

### COMPUTER SYSTEM REQUIREMENTS\*

\*For device connectivity. Bundled software requirements may vary.  
Windows: Windows XP/Vista, USB port  
Mac: MacOS 10.2 or later, USB 2.0 port

# Lens Features

Digital sensors are perfectly flat, which requires a higher level of precision when PENTAX designs lenses. This means developing lenses that have the optimal lens curvature, particularly the last lens element before the sensor. The application of multiple lens coatings, such as the PENTAX original smc coating and ghostless coatings, is necessary to prevent external and internal reflections to capture optimal detail even in the most difficult lighting conditions. The effects of chromatic and spherical aberrations are minimized through the use of ED and aspherical glass elements. All these technologies are combined to create lenses that will give the highest level of detail with the high resolution sensors used in PENTAX digital SLR bodies.



smc-DA 21mm  
f/3.2 AL Limited



smc-DA 40mm  
f/2.8 Limited



smc-DA 70mm  
f/2.4 Limited



smc-DA 35mm  
f/2.8 ED Macro Limited



smc-DA 14mm  
f/2.8 ED(IF)



smc-FA 50mm  
f/1.4



smc FA 31mm  
f/1.8 Limited



smc FA 43mm  
f/1.9 Limited



smc FA 77mm  
f/1.8 Limited



smc-D FA 50mm  
f/2.8 Macro



smc-D FA 100mm  
f/2.8 Macro



smc-DA 10-17mm  
f/3.5-4.5 ED (IF) Fish-Eye



smc-DA 12-24mm  
f/4.0 ED AL(IF)



smc-DA 16-45mm  
f/4.0 ED AL



smc-DA 18-250mm  
f/3.5-6.3 ED AL(IF)



smc-DA 50-200mm  
f/4.0-5.6 ED



smc-DA 55-300mm  
f/4-5.8 ED



smc-DA\* 16-50mm  
f/2.8 ED AL(IF) SDM



smc-DA\* 50-135mm  
f/2.8 ED AL(IF) SDM



smc-DA\* 200mm f/2.8 ED(IF) SDM



smc-DA\* 300mm f/4.0 ED(IF) SDM

# K20D and K200D Accessories

Sold separately

## Battery Grip

**BG2 Battery Grip (K20D only)** - The grip uses the same Li-Ion battery as the camera (sold separately) and will double the shooting time with the K20D, up to 1400 shots. This grip features an additional shutter release, adjusting dials for selecting aperture or shutter speed and other functional controls. The battery compartment provides storage space for a memory card and remote control next to the batteries.



**BG3 Battery Grip (K200D only)** - The BG3 grip will hold an additional four AA batteries to double your shooting time with the K200D, up to an impressive 2200 shots with Lithium AA batteries. Additionally, the grip has a shutter release button to comfortably accommodate vertical shooting.

## Replacement Battery

**D-LI50 (K20D only)** Interchangeable power: with a pre-charged spare battery you'll never have to stop shooting.



## Remote Control F

Shutter release without blur: With the infrared remote control you operate the shutter from in front of or behind the camera up to 16 feet away.

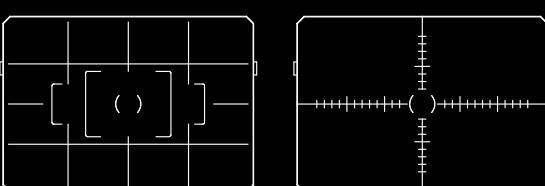


## Viewfinder Loupe O-ME53

With the Viewfinder Loupe attached the finest details will grab your attention. The 1.2x magnification facilitates the assessment of fine details more accurately.

## Optional Focusing Screens (K20D only)

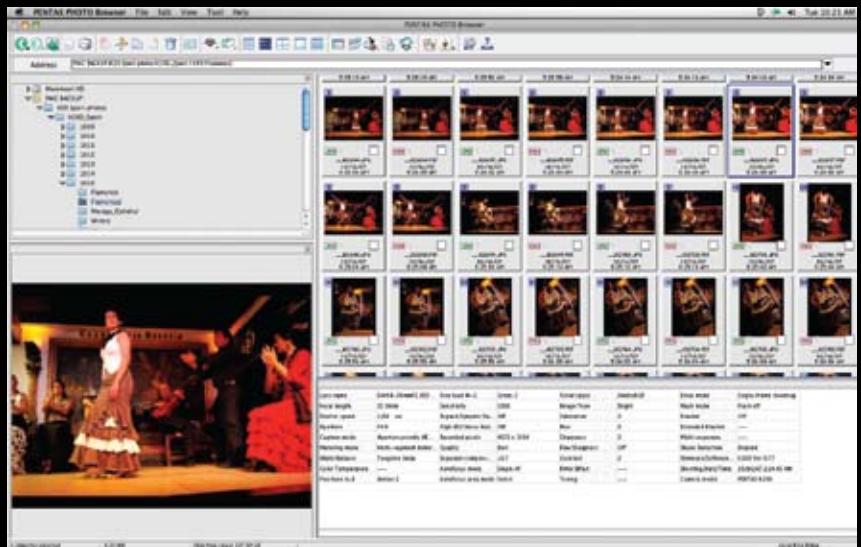
PENTAX offers two optional focusing screens for the K20D to replace the standard screen. The AF Divided Matte screen combines the focus area brackets with a grid to assure proper composition. The AF Scale Matte screen provide a scale to verify subject placement for critical applications.



# Software Features

## PENTAX Photo Browser™ 3.5

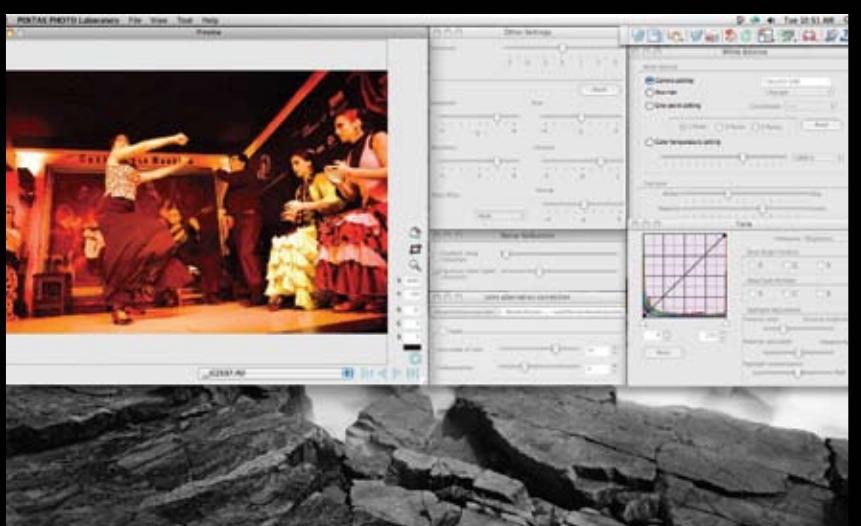
This software facilitates various post-shooting operations, including the transfer of recorded images and the filing, browsing, editing, simple revision, and printing of transferred images on a PC. PENTAX Photo Browser™ 3.5 offers fast image processing speed, simplified image transfer operations, enhanced docketing and protect functions, and a detailed image data display plus the ability to convert files to the DNG format.



- Speedy transfer of recorded images to a PC
- Thumbnail display in four different sizes
- Instant preview of a selected image
- Detailed image data display, including a Scene mode name
- A variety of image file editing functions
- Extraction and filing of JPEG format from RAW data
- Addition of a data conversion function to Adobe DNG format
- Image rotation, image magnification and slide show functions
- Automatic image quality compensation function
- Simple print function

## PENTAX Photo Laboratory™ 3.5

This software not only processes undeveloped RAW data, but also offers a variety of image editing functions on a PC. Featuring SILKYPIX (developed by ICHIKAWA SOFT LABORATORY) as its image-development engine, it assures fast data processing speeds and also performs various image-editing and data-manipulation functions without requiring additional retouching software.



- Display of RAW data files
- Development and filing of RAW data in JPEG and TIFF formats
- Simplified image editing, with sensitivity, brightness, saturation, contrast and outline controls
- Gradation control using a tone curve
- Histogram display, with over and underexposure warnings
- White-balance control using a gray point
- Direct printing of RAW data files
- Noise Reduction, peripheral brightness control, distortion compensation and chromatic aberration compensation functions
- Image compensation for digital shift

# Flash System

## AF540 FGZ



- Guide number of 54 at ISO 100/m (178 at ISO 100/ft)
- Bounce and swivel head
- P-TTL mode with preflash allows for more accurate strobe photography
- Wireless P-TTL flash
- High speed on camera and high speed wireless flash modes
- Flash exposure compensation through a simple control dial
- Auto and Manual modes for more creative control
- LCD display shows the effective range of the flash
- Modeling light feature strobes the flash for one second
- Autofocus assist beam for focusing in low light or low contrast situations

## AF360 FGZ

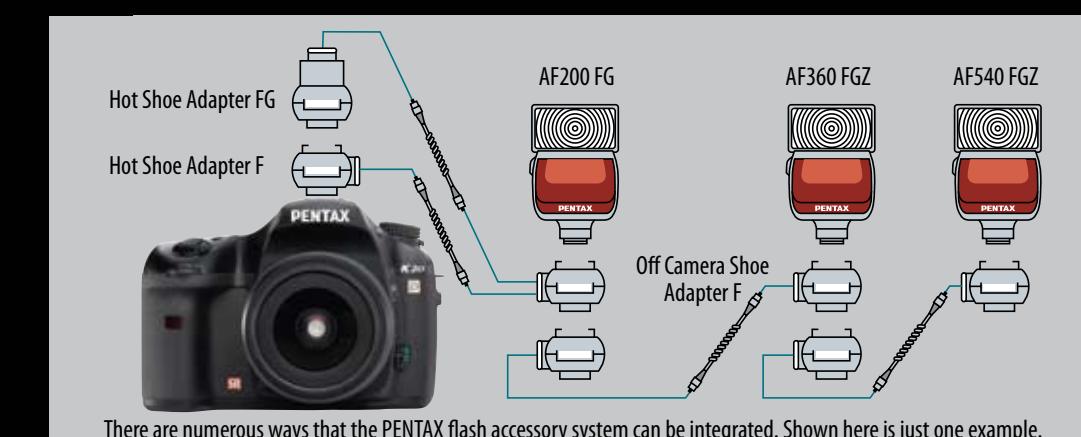


- Guide number of 36 at ISO 100/m (119 at ISO 100/ft)
- P-TTL mode with preflash allows for more accurate strobe photography
- Bounce head
- Wireless P-TTL flash
- High speed on camera and high speed wireless flash modes
- Flash exposure compensation through a simple control dial
- Auto and Manual modes for more creative control
- LCD display shows the effective range of the flash
- Modeling light feature strobes the flash for one second
- Autofocus assist beam for focusing in low light or low contrast situations

## AF200 FG



- Compact design with a guide number of 20 at ISO 100/m (66 at ISO 100/ft)
- Simple mode dial operation offers P-TTL with pre-flash to assure proper exposure
- Flash exposure compensation can be set to -0.5 and -1 EV in P-TTL mode through dial
- Full manual mode for more creative control
- Flash coverage for focal lengths as wide as 28mm (in the 35mm format)
- Built-in, flip down diffuser covers focal lengths down to 24mm (in the 35mm format)



There are numerous ways that the PENTAX flash accessory system can be integrated. Shown here is just one example.



# PENTAX®

[pentaxslr.com](http://pentaxslr.com)

[pentaximaging.com](http://pentaximaging.com)

[pentaxphotogallery.com](http://pentaxphotogallery.com)

All images captured with the K20D (excluding product images).  
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